

IN THE CLAIMS:

Please amend the claims as follows:

4. (Amended) An isolated nucleic acid encoding mammalian heart alpha kinase expressed in the heart and having alpha kinase activity, wherein the nucleic acid is selected from the group consisting of :

- a. the DNA sequence of SEQ ID NO: 34;
- b. DNA sequences that hybridize to the sequence of subpart (a) under standard hybridization conditions; and
- c. DNA sequences capable of encoding the amino acid sequence encoded by the DNA sequences of subparts (a) or (b).

16. (Amended) A unicellular host transformed with a recombinant DNA molecule comprising a DNA sequence or degenerate variant thereof, which encodes a heart alpha kinase; ~~or a fragment thereof~~, selected from the group consisting of:

- a. the DNA sequence of (SEQ ID NO: 34);
- b. DNA sequences that hybridize to the foregoing DNA sequence under standard hybridization conditions; ~~and~~
- c. DNA sequences that encode an amino acid sequence encoded by any of the foregoing DNA sequences; and
- d. a fragment of SEQ ID NO:34 which encodes a polypeptide expressed in the heart and having alpha kinase activity;

wherein said DNA sequence is operatively linked to an expression control sequence.

REMARKS

The foregoing amendments and the following remarks are submitted in response to the communication dated September 23, 2003.